

REMARKS

This is intended as a full and complete response to the Office Action dated June 20, 2003, having a shortened statutory period for response set to expire on September 20, 2003. Please reconsider the claims pending in the application for reasons discussed below.

In the specification, paragraphs 26 and 30 have been amended to clarify the specification and do not introduce new subject matter. In amended Figure 2, the previously omitted element numerals 21a and 21b have been added. In amended Figure 3, the previously omitted element numerals 21a and 21b have been added.

Claims 3-6, 20-23, 29-33 and 37-41 remain pending in the application and are shown above. Claims 1, 2, 7-19, 24-28, 34-36 and 42-51 have been cancelled by Applicant. Reconsideration of the rejected claims is requested for reasons presented below.

Claims 3, 4, 20, 22, 29, 31 and 32 are amended to clarify the invention. These amendments are not presented to distinguish a reference, thus, the claims as amended are entitled to a full range of equivalents if not previously amended to distinguish a reference.

Claims 3-6, 20-23, 29-33 and 37-41 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over co-pending claims 12-19 of U.S. Patent Application Serial No. 09/798,258, in view of U.S. Patent No. 5,423,936. Applicants respectively traverse the rejection. Every claim in the present application provides a lid assembly comprising a reservoir fluidly connected to a gas manifold. Co-pending claims 12-19 of Application '258 and patent '936 alone or in combination, do not teach, show, or suggest a lid assembly comprising a reservoir fluidly connected to a gas manifold. Accordingly, Applicants request withdrawal of the rejection.

Claims 3-6, 20-23, 29-33 and 37-41 stand rejected under 35 USC § 103(a) as being unpatentable over Conger, *et al.*, U.S. Patent No. 4,761,269, (herein *Conger*), in view of Hao, *et al.*, U.S. Patent No. 6,123,775, (herein *Hao*), on grounds that it would have been obvious for one of ordinary skill in the art to combine the baffle plate and lid

assembly of *Hao* with the lid assembly of *Conger* which includes a "reservoir" (56 in Figure 1). Applicants respectfully traverse the rejection.

Conger teaches a deposition apparatus containing a conventional bubbler comprising a stainless steel ampoule (56) immersed in a conventional temperature-controlled recirculating bath (58). The ampoule is a remote unit that is detached from the deposition chamber. *Conger* flows a nonreactive gas, such as hydrogen, through the heated ampoule to vaporize a precursor, such as a metalorganic compound. The gas source (18) represents a metalorganic compound through which a carrier gas is bubbled to inject the compound in vapor form into the chamber (12). *Hao* teaches a baffle plate assembly coupled to a gas distribution lid.

Therefore, *Conger* and *Hao*, alone or in combination, do not teach, show, or suggest a lid assembly for a semiconductor processing system, comprising a gas control system comprises a gas manifold disposed on a lid, at least one valve coupled to the gas manifold adapted to control a flow through one of a flow channels and a reservoir fluidly connected to the gas manifold, as recited in claim 3, and claims dependent thereon. Also, *Conger* and *Hao*, alone or in combination, do not teach, show, or suggest a first channel, a second channel and a third channel each extending through a gas manifold to a lower surface and a valve coupled to the gas manifold and a gas reservoir fluidly connected to the gas manifold, as recited in claim 22, and claims dependent thereon. Furthermore, *Conger* and *Hao*, alone or in combination, do not teach, show, or suggest a thermal conditioning channel disposed in a gas manifold fluidly coupled to at least one of the plurality of gas channels by a valve and a gas reservoir fluidly connected to the gas manifold and fluidly coupled to the valve by the thermal conditioning channel, as recited in claim 31, and claims dependent thereon. Therefore, withdrawal of the rejection is respectfully requested.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to Applicants' disclosure than the primary references cited in the office action. Therefore, Applicants believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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